

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-22 (canceled)

Claim 23 (currently amended): A method of treatment of a patient having a condition associated with the level of CLCA1, comprising contacting cells of said patient with the a nucleic acid molecule of claim 1 that down regulates expression of CLCA1 (Chloride Channel Calcium Activated) gene under conditions suitable for said treatment.

Claim 24 (previously presented): The method of claim 23 further comprising the use of one or more therapies under conditions suitable for said treatment.

Claim 25 (currently amended): A method of cleaving RNA of a CLCA1 gene, comprising contacting the an enzymatic nucleic acid molecule of claim 3 that down regulates expression of CLCA1 (Chloride Channel Calcium Activated) gene with said RNA under conditions suitable for the cleavage of said RNA.

Claim 26 (previously presented): The method of claim 25, wherein said cleavage is carried out in the presence of a divalent cation.

Claim 27 (previously presented): The method of claim 26, wherein said divalent cation is Mg^{2+} .

Claims 28-44 (canceled)

Claim 45 (currently amended): A method for treatment of chronic obstructive pulmonary disease comprising the step of administering to a patient ~~the~~ a nucleic acid molecule of claim 1 that down regulates expression of CLCA1 (Chloride Channel Calcium Activated) gene under conditions suitable for said treatment.

Claim 46 (currently amended): A method for treatment of cystic fibrosis comprising the step of administering to a patient ~~the nucleic acid molecule of claim 1~~ that down regulates expression of CLCA1 (Chloride Channel Calcium Activated) gene under conditions suitable for said treatment.

Claims 47-48 (canceled)

Claim 49 (currently amended): The method of claims 45 or 46, wherein said method further comprises administering to said patient the nucleic acid molecule ~~of claim 1~~ in conjunction with one or more other therapies.

Claim 50 (previously presented): The method of claim 49, wherein said other therapies are therapies selected from the group consisting of oxygen therapy, bronchodilators,

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Serial No. 09/927,046
Attorney Docket MBHB 00-814-A
Filing Date: August 9, 2001

corticosteroids, antibacterials, vaccinations, acetylcysteine, mucokinetic agents, and DNase (Pulmozyme) treatments.

Claims 51-60 (canceled)

Claim 61 (new): A method of reducing CLCA1 activity in a cell, comprising the step of contacting said cell with an enzymatic nucleic acid molecule, under conditions suitable for said reduction of CLCA1 activity, wherein said enzymatic nucleic acid molecule comprises a binding arm having a sequence complementary to any sequences having SEQ ID NOs:1-2189 and 5399-5416.

Claim 62 (new): A method of reducing CLCA1 activity in a cell, comprising the step of contacting said cell with an enzymatic nucleic acid molecule, under conditions suitable for said reduction of CLCA1 activity, wherein said enzymatic nucleic acid molecule comprises any of sequences having SEQ ID NOs:2190-5398 and 5425-5434.

Claim 63 (new): The method of claim 61, wherein said enzymatic nucleic acid molecule is in a hammerhead (HH) motif.

Claim 64 (new): The method of claim 62, wherein said enzymatic nucleic acid molecule is in a hammerhead (HH) motif.

Claim 65 (new): The method of claim 61, wherein said enzymatic nucleic acid molecule is in a hairpin, hepatitis Delta virus, group I intron, VS nucleic acid, amberzyme, zinzyme or RNase P nucleic acid motif.

Claim 66 (new): The method of claim 62, wherein said enzymatic nucleic acid molecule is in a hairpin, hepatitis Delta virus, group I intron, VS nucleic acid, amberzyme, zinzyme or RNase P nucleic acid motif.

Claim 67 (new): The method of claim 61, wherein said enzymatic nucleic acid molecule is in an Inozyme motif.

Claim 68 (new): The method of claim 62, wherein said enzymatic nucleic acid molecule is in an Inozyme motif.

Claim 69 (new): The method of claim 61, wherein said enzymatic nucleic acid molecule is in a G-cleaver motif.

Claim 70 (new): The method of claim 62, wherein said enzymatic nucleic acid molecule is in a G-cleaver motif.

Claim 71 (new): The method of claim 61, wherein said enzymatic nucleic acid molecule is a DNzyme.

Claim 72 (new): The method of claim 62, wherein said enzymatic nucleic acid molecule is a DNAzyme.

Claim 73 (new): The method of claim 61, wherein said nucleic acid molecule comprises between 12 and 100 bases complementary to RNA of a CLCA1 gene.

Claim 74 (new): The method of claim 62, wherein said nucleic acid molecule comprises between 12 and 100 bases complementary to RNA of a CLCA1 gene.

Claim 75 (new): The method of claim 61, wherein said nucleic acid molecule comprises between 14 and 24 bases complementary to RNA of a CLCA1 gene.

Claim 76 (new): The method of claim 62, wherein said nucleic acid molecule comprises between 14 and 24 bases complementary to RNA of a CLCA1 gene.